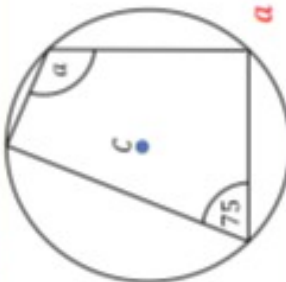


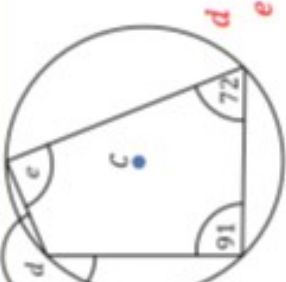

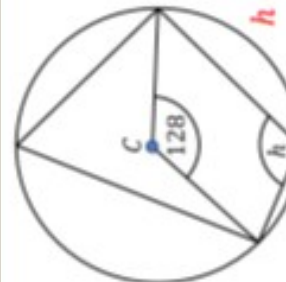


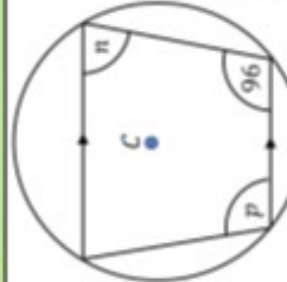
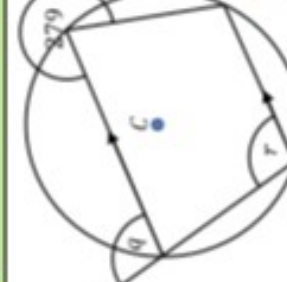


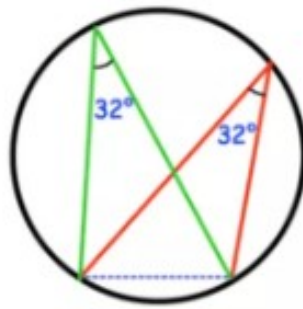


# (5) Angles in the same segment

Do now:

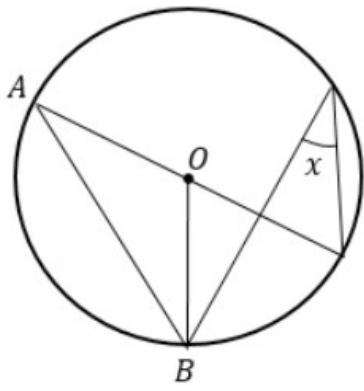
Cyclic Quadrilaterals				
(a)	(b)	(c)	(d)	
 $a = 105^\circ$	 $b = 70^\circ$	 $c = 88^\circ$	 $d = 252^\circ$ $e = 89^\circ$	
(e)	(f)	(g)	(h)	
 $f = 90^\circ$ $g = 90^\circ$	 $h = 116^\circ$	 $j = 255^\circ$	 $k = 68^\circ$ $m = 224^\circ$	
(i)	(j)	(k)	(l)	
 $n = 84^\circ$ $p = 96^\circ$	 $q = 99^\circ$ $r = 99^\circ$	 $y = x$	 $y = \frac{x}{2}$	



The angles in the same segment from a common chord are equal

Angles from the Same Segment			
<b>(a)</b>  $a = 37^\circ$	<b>(b)</b>  $b = 42^\circ$	<b>(c)</b>  $c = 36^\circ$ $d = 57^\circ$	<b>(d)</b>  $e = 68^\circ$
<b>(e)</b>  $f = 25^\circ$	<b>(f)</b>  $g = 44^\circ$	<b>(g)</b>  $h = 44^\circ$	<b>(h)</b>  $j = 35^\circ$ $k = 35^\circ$
<b>(i)</b>  $m = 54^\circ$ $n = 54^\circ$	<b>(j)</b>  $p = 61^\circ$ $q = 119^\circ$	<b>(k)</b>  Find $y$ in terms of $x$ $y = 180 - x$	<b>(l)</b>  Find $y$ in terms of $x$ $y = 2x$

Extension: Determine angle AOB in terms of  $x$



$$\angle AOB = 180 - 2x$$